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(54) Title: PALLADIUM-BASED CATALYST FOR SELECTIVE HYDROGENATION OF ACETYLENE

(57) Abstract: The present invention describes a Pd-catalyst, further consisting of La, Ti, Nb, K or Si, which have high ethylene selectivity even after a low temperature reduction in the se-lective hydrogenation of acetylene to ethylene and the production method of the same. A catalyst of the invention consists essentially of 0.05 to 2.0% by weight, based on the supported catalyst, of palladium and one or two metals chosen form the group consist-ing of lanthanum, niobium, titanium, potassium and silicon. The said catalyst is pre-pared by the following procedure: 1) Impregnating a support in aqueous solution of tetra amine palladium hydroxide, followed by drying and calcination; 2) The second and, if necessary, a third metal is impregnated by impregnating the Pd-catalyst in the solution of the metal precursor followed by drying and calcina-tion; 3) The catalyst according to step (2) is then reduced in hydrogen at 200°C to 600°C for 1 to 5 hours.

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